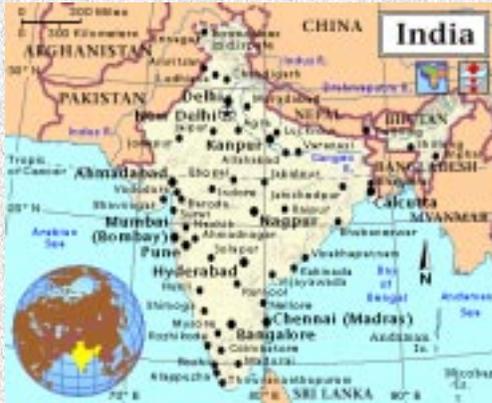


INDIA

Winrock International



Although 85% of the villages in India are deemed to have been electrified, 71 million rural households still do not use electricity.

Renewable Energy Program Government of India

- The Indian Renewable Energy Development Agency (IREDA) was set up by the Ministry of Energy in 1987 to provide assistance to manufacturers and users of renewable energy systems.
- In 1992, the Ministry of Non-Conventional Energy Sources (MNES) was established as a department in the Ministry of Energy.
- The Ministry implements the Integrated Rural Energy Program transferred to it from the Planning Commission.
- A National Program on Biogas Development is a major program of the Ministry.
- Cogenerated power: GOI policies include wheeling and banking, third-party sales, and buyback.
- Wind power: The major source for power generation among renewables, with 1.4 billion units of electricity being supplied to the grid so far.

Cogeneration in the Indian Sugar Industry

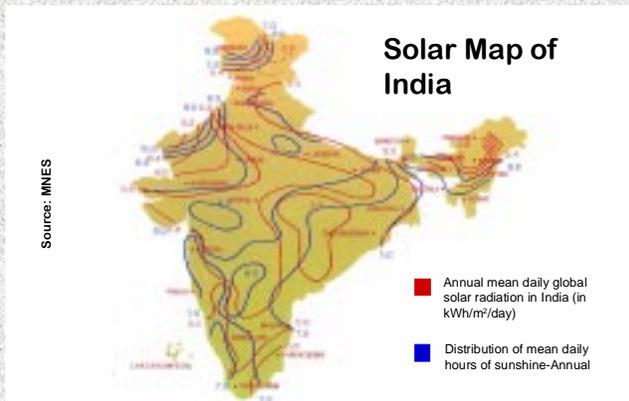
- Indian sugar industry
- Exporting power to the grid
- Initiatives began in 1995
- Uttar Pradesh, Tamil Nadu, Maharashtra, Karnataka, and Andhra Pradesh
- Installing high-pressure boilers and superior turbines, making condenser modifications, and utilizing bagasse as fuel
- Existing and planned: 310.8 MW.



Bagasse plant equipped with an 18-MW turbo-generator set with 66 kg/cm² pressure and 485°C temperature boilers



Gathering sugar cane trash to make bagasse



Commercialization of Solar PV Powered Dryer

- Dr. Rao Associates
- Commercial solar cabinet dryers of natural convection or "forced circulation" type to enable larger quantities of hygienic and good quality food products to be dried faster and generate additional income for rural women and men engaged in this activity
- Began in 1998
- Andhra Pradesh
- Designed and developed by the Society for Energy, Environment, and Development under sponsorship of UNDP-GEF's Small Grant Program, through Development Alternatives, a New Delhi NGO
- Two sizes, 2' x 2' and 2' x 4', using dry materials ranging from 4 kg to 15 kg per charge.

Solarizing Rural India

- SELCO Photovoltaic Electrification, Pvt. Ltd.
- Provide electricity to the rural population and integrate PV into the mainstream of the local culture
- Began in 1995 in Southern India
- Developing and marketing small-scale solar PV power systems to rural households and institutions
- Prices varies.



A branch office of SELCO

For rural families, an investment spread over a two- or three-year period can make a basic home PV system a possibility.